

AMENDMENTS TO THE CLAIMS

Applicant amends claim 16 and cancels claim 38. Accordingly, claims 16, 22, 24, 27, 28, 35 and 36 remain pending upon entry of this amendment. An updated listing of claims showing all changes is provided for the convenience of the examiner.

List of Claims

1-15 (Canceled)

16. (Currently amended) A process for stabilizing or preserving a biomolecule comprising the steps of:

- (a) providing a biomolecule immobilized on a surface; and
- (b) covering the surface with a composition comprising:
 - i. at least one non-reducing disaccharide selected from the group consisting of trehalose (D-glucopyranosyl-D-glucopyranoside), sucrose (β -D-fructofuranosyl- α -D-glucopyranoside), and a derivative thereof; and
 - ii. at least one protein or polypeptide of the Late Embryogenesis Abundant (LEA) class comprising a motif comprising 11 amino acids, wherein the motif is selected from the group consisting of:
 - (a) K-T-A-E-F-R-D-S-A-G-E (SEQ ID NO. 2),
 - (b) K-G-Q-E-F-K-E-R-A-G-E (SEQ ID NO. 3),
 - (c) K-A-E-E-T-K-Q-R-A-G-E (SEQ ID NO. 4),
 - (d) K-M-D-E-T-K-Q-R-A-G-E (SEQ ID NO. 5),
 - (e) K-A-R-K-T-K-D-S-A-A-E (SEQ ID NO. 6),
 - (f) K-A-K-E-Y-K-D-Y-T-A-E (SEQ ID NO. 7),
 - (g) K-A-R-E-T-T-E-K-A-R-E (SEQ ID NO. 8), and
 - (h) T-K-D-S-A-A-E-K-A-R-E (SEQ ID NO. 9).

17-21 (Canceled)

22. (Previously presented) A process according to claim 16, wherein said non-reducing disaccharide is present at from 0.01 to 15 weight percent in relation to a ready-to-use solution and said protein or polypeptide of the LEA class is present at from 0.00001 to 1 weight percent in relation to the ready-to-use solution.

23. (Canceled)

24. (Previously presented) A process for the production of a surface with an immobilized and stabilized or preserved biomolecule, comprising the steps of:

- (a) providing a surface with a biomolecule immobilized thereon; and
- (b) covering the biomolecule with a composition comprising:
 - i. at least one non-reducing disaccharide selected from the group consisting of trehalose (D-glucopyranosyl-D-glucopyranoside), sucrose (β -D-fructofuranosyl- α -D-glucopyranoside), and a derivative thereof; and
 - ii. at least one protein or polypeptide of the (LEA) class comprising a motif comprising 11 amino acids, wherein the motif is selected from the group consisting of:
 - (a) K-T-A-E-F-R-D-S-A-G-E (SEQ ID NO. 2),
 - (b) K-G-Q-E-F-K-E-R-A-G-E (SEQ ID NO. 3),
 - (c) K-A-E-E-T-K-Q-R-A-G-E (SEQ ID NO. 4),
 - (d) K-M-D-E-T-K-Q-R-A-G-E (SEQ ID NO. 5),
 - (e) K-A-R-K-T-K-D-S-A-A-E (SEQ ID NO. 6),
 - (f) K-A-K-E-Y-K-D-Y-T-A-E (SEQ ID NO. 7),
 - (g) K-A-R-E-T-T-E-K-A-R-E (SEQ ID NO. 8), and
 - (h) T-K-D-S-A-A-E-K-A-R-E (SEQ ID NO. 9).

25. (Canceled)

26. (Canceled)

27. (Previously presented) A surface of a material selected from the group consisting of glass, quartz glass, quartz, silicon, polymers, nitrocellulose, nylon and micro fiber membranes, and paper, wherein the surface includes a biomolecule immobilized thereon, covered with a stabilizing or preserving composition comprising:

at least one non-reducing disaccharide selected from the group consisting of trehalose (D-glucopyranosyl-D-glucopyranoside), sucrose (β -D-fructofuranosyl- α -D-glucopyranoside), and a derivative thereof; and

at least one protein or polypeptide of the LEA class comprising a motif comprising 11 amino acids, wherein the motif is selected from the group consisting of:

- (a) K-T-A-E-F-R-D-S-A-G-E (SEQ ID NO. 2),
- (b) K-G-Q-E-F-K-E-R-A-G-E (SEQ ID NO. 3),
- (c) K-A-E-E-T-K-Q-R-A-G-E (SEQ ID NO. 4),
- (d) K-M-D-E-T-K-Q-R-A-G-E (SEQ ID NO. 5),
- (e) K-A-R-K-T-K-D-S-A-A-E (SEQ ID NO. 6),
- (f) K-A-K-E-Y-K-D-Y-T-A-E (SEQ ID NO. 7),
- (g) K-A-R-E-T-T-E-K-A-R-E (SEQ ID NO. 8), and
- (h) T-K-D-S-A-A-E-K-A-R-E (SEQ ID NO. 9).

28. (Previously presented) A surface according to claim 27, wherein said non-reducing disaccharide is present at from 0.01 to 15 weight percent in relation to a ready-to-use solution and said protein or polypeptide of the LEA class is present at from 0.00001 to 1 weight percent in relation to the ready-to-use solution.

29 - 34. (Canceled)

35. (Previously presented) An analytical and/or diagnostic device, comprising a surface as defined in claim 27.

36. (Previously presented) A device according to claim 35 selected from the group consisting of biochips, sensor chips, microtiter plates, test tubes and culture dishes.

37. (Canceled)

38. (Canceled)